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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/090,119

02/28/2002

Eric T. Bovell

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10/07/2002

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EXAMINER

VU, PHUONG T

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 10/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/090,119

Applicant(s)

BOVELL, ERIC T.

Examiner

Phuong T. Vu

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. There is no antecedent basis for the claimed data interface and power supply ports and data interface and power supply connectors.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

4. Claims 1, 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Yeom et al. (US 5,327,323). Regarding claim 1, the reference discloses a sled module for a mass storage device comprising a housing 1, a circuit board 4 mounted to a portion of the housing, the circuit board having an end mounted connector 40 for control signals, a

mass storage device H having an enclosure and a control signal connector HC, spacers (side edge portions of guide 5) positioning the mass storage device within the housing at a position juxtaposed with respect to the circuit board such that the signal connectors on the circuit board and the mass storage device are aligned with one another, the spacers thus permitting the sled module to adapt to mass storage devices having enclosures with different configurations.

Regarding claim 5, the mass storage device is a hard disk drive.

Regarding method claims 11-12, one would necessarily perform the recited steps in inserting the mass storage device in the sled module rejected above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3-4, 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yeom et al. (US 5,327,32). Regarding claim 3, the mass storage device has only one connector, however, it is known in the art to provide mass storage devices with a separate data interface port and a power supply port. Correspondingly, the circuit board would also then have a data interface connector and a power supply connector. The examiner takes Official Notice.

Regarding claim 4, the spacers position the mass storage device so that its connector mates with the connector of the circuit board. If separate connectors were

provided as recited in claim 3, the spacers would necessarily position the mass storage device so that the data interface and power supply ports of the mass storage device mate with the corresponding connectors of the circuit board.

Regarding claim 7, the reference is silent regarding the material composition of the spacers. However, it would have been obvious that the spacers may be formed from plastic.

Similarly, method claim 13 is rejected.

7. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sherry (US 5,757,617) over Wakita (US 5,488,538). Regarding claim 1, the Sherry reference discloses a sled module for a mass storage device comprising a housing 80, a circuit board 72 mounted to a portion of the housing, the circuit board having an end mounted connector 68 for control signals, a mass storage device 60 having an enclosure and a control signal connector 62. The reference does not teach providing spacers to accommodate different sized mass storage devices, however, Wakita teaches that it is known to provide spacers 20,30 for positioning a mass storage device 3 within a housing 12, the spacers thus permitting the housing to adapt to mass storage devices having enclosures with different configurations. It would have been obvious to those skilled in the art at the time the invention was made to modify the sled module of Sherry to provide spacers as taught by Wakita to allow the sled module to accommodate mass storage devices with different configurations to expand the functionality of the sled module without incurring the production cost of having to redesign and remake the sled module for each variation of mass storage devices. In

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such a configuration, the spacers would position the mass storage device within the housing at a position juxtaposed with respect to the circuit board such that the signal connectors on the circuit board and the mass storage device are aligned with one another.

Regarding claim 2, the Sherry reference teaches providing a cover 88. It would have been obvious to those skilled in the art at the time the invention was made that a hole may be provided allowing the mass storage device to protrude through the cover for easy access to the mass storage device.

Regarding claim 3, both references show that the mass storage device has only one connector, however, it is known in the art to provide mass storage devices with a separate data interface port and a power supply port. Correspondingly, the circuit board would also then have a data interface connector and a power supply connector. The examiner takes Official Notice.

Regarding claim 4, the spacers position the mass storage device so that its connector mates with the connector of the circuit board. If separate connectors were provided as recited in claim 3, the spacers would necessarily position the mass storage device so that the data interface and power supply ports of the mass storage device mate with the corresponding connectors of the circuit board.

Regarding claim 5, both references show that the mass storage device is a hard disk drive.

Regarding claim 6, those skilled in the art would recognize that the above mentioned sled module may accommodate a CD-ROM drive, DVD drive or digital tape drive to further expand its functionality.

Regarding claims 7-8, the reference is silent regarding the material composition of the spacers. However, it would have been obvious that the spacers may be formed from plastic or rubber.

Regarding claims 9-10, it would have been obvious to those skilled in the art at the time the invention was made that the spacers may be made of a flexible, compressible material to provide shock absorption.

Regarding method claims 11-16, one would necessarily perform the recited steps in inserting the mass storage device in the sled module rejected above.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong T. Vu whose telephone number is (703) 308-0303. The examiner can normally be reached on Mon. & Tues., 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on (703) 308-3121. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-4341.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1765.

Phuong
Patent Examiner
9/26/02